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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,466	03/26/2004	Theodore Rappaport	02560035BB	7640

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EXAMINER
SAXENA, AKASH

ART UNIT	PAPER NUMBER
2128	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/809,466	RAPPAPORT ET AL.
	Examiner	Art Unit	
	Akash Saxena	2128	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>24 June 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>13-40</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>13-40</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>3/26/04</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

1. Claims 13-40 have been presented for examination based on the application filed on 24th May 2004.

2. Claim(s) 1-12 is/are cancelled.

3. Claim(s) 13-40 remain rejected under obvious type Double Patenting with U.S. Patent Application No. 10/776505.

4. Claim(s) 13-40 remain rejected under 35 USC § 112.

5. Claim(s) 13-40 remain rejected under 35 USC § 103.

Double Patenting

The <u>nonstatutory double patenting rejection</u> is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claim 13 & 27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 &30 respectively of U.S. Patent Application No. 10/776505 (Rappaport'505 hereafter) and U.S. Patent No. 6509906 (Awe hereafter).

U.S. Patent Application No. 10/809466	Rappaport'505
A computer implemented method for creating or manipulating <u>one or more drawings or sets of formatted data representing a physical environment</u>, comprising the steps of:	A computer implemented method for creating, formatting or editing <u>a database model of a physical environment</u>, comprising the steps of:
a) using a computer for creating, formatting, editing or manipulating one or more objects defining an environment in which an in-building or campus communications network may be deployed, said environment having one or more of floors, walls, partitions, buildings, building complexes or compounds, terrain, foliage, or other sites or obstructions;	a) using a computer for editing one or more objects defining a modeled environment in which an in-building or campus communications network is or will be deployed, said environment having one or more of floors, walls, partitions, buildings, building complexes or compounds, terrain, foliage, or other sites or obstructions;
b) grouping a number of said one or more objects into at least one editable layer;	
c) verifying, using a computer, the sufficiency of said one or more objects to ensure a useful definition of said environment and notifying a user of results of said verification of sufficiency;	b) verifying, using a computer, the sufficiency of said one or more objects to ensure a useful definition of said modeled environment and notifying a user of results of said verification of sufficiency;
d) generating 'at least one formatted drawing or	c) generating a set of formatted data based at

at least one set of formatted data containing computer representations of said one or more objects in a form transportable to and usable by a communications engineering or network management application; and	least in part on said verification of sufficiency for use in a communications engineering or network management application; and
e) rendering a three-dimensional view of said environment.	d) rendering a three-dimensional view of said modeled environment.

Although the claims are not identical, they are not patentably distinct from each other because the missing step in the Rappaport'505 is taught secondary reference Awe also teaches grouping objects (Awe: Col.4 Lines 45-61). It would have been obvious to combine the Rappaport'505 with Awe as both are directed towards three dimensional representation and grouping of CAD objects (Awe: Col.4 Lines 45-61; Rappaport'505: Abstract).

Claim 27 of instant application and claim 30 of Rappaport'505 are "means for" versions of claims 13 of instant application and claim of 13 of Rappaport'505 and are rejected for the same reasons. Further dependent claims are almost identical.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 13-40 are objected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention as it is unclear how the "or" should be interpreted.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the

various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the

obligation under 37 CFR 1.56 to point out the inventor and invention dates of each

claim that was not commonly owned at the time a later invention was made in order

for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35

U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. **Claims 13-16, 18-19, 21-30, 31-33 and 35-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,337,149 issued to Kozah et al (Kozah hereafter), in view of U.S. Patent No. 6,509,906 issued to Awe et al (Awe hereafter).**

Regarding Claim 13

Kozah teaches a computer implemented method for creating or manipulating one or more drawings representing a physical environment (Kozah: Abstract, Fig.1; Col.2 Lines 62-66), method comprising

Kozah teaches step a) *using a computer for creating, formatting, editing or manipulating one or more objects defining an environment in which an in-building* (Kozah: Fig.1; Col.2 Lines 62-66), *said environment having one or more of floors, walls, partitions, buildings, building complexes or compounds, terrain, foliage, or other sites or obstructions* (Kozah: Col.7 Lines 1-2 Lines 55-65; Col. 8 Lines 50-50 – for manipulating different objects) as acquiring measurements of environment having various features and then labeling the features with capability to edit features afterwards.

Kozah does not teach step b) *grouping a number of said one or more objects into at least one editable layer.*

Kozah teaches step c) *verifying, using a computer, the sufficiency of said one or more objects to ensure a useful definition of said environment* (Kozah: Col.5 Lines 11-14) *and notifying a user of results of said verification of sufficiency* (Kozah: Fig.9 Col.8 Lines 34-55);

Kozah does not explicitly teaches the step d) *generating at least one formatted*

drawing or at least one set of formatted data containing computer representations of

said one or more objects in a form transportable to and usable by a communications

engineering or network management application; although Kozah teaches storing

the object/position information in the CAD database in CAD application (Kozah:

Col.9 Lines 13-31).

Kozah teaches step e) rendering a three-dimensional view of said environment

(Kozah: Abstract; Col.4 Lines 1-12).

Awe teaches step b) *grouping a number of said one or more objects into at least*

one editable layer (Awe: Fig.8 Element 806; Col.7 Line 16-20; Col.4 Lines 45-61) as

groups the display representation.

Awe also teaches d) *generating at least one formatted drawing or at least one set*

of formatted data containing computer representations of said one or more objects in

a form transportable to and usable by a communications engineering or network

management application (Awe: Col.3 Lines 18-60) as data stored in a storage device

associated with a CAD program.

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at

the time the invention was made to apply the teachings of Awe to Kozah to create a

three dimensional representation of the building data. The motivation to combine

would have been that Kozah gathers the information and build the three dimensional

model but does not disclose the details of how the measurements are mapped to the

primitive objects (Kozah: Col.7 Lines 55-65; Awe: Col.1 Line 62-Col.2 Line 6) to

create a three dimensional view of the building, a deficiency cured by Awe by using

streams (Col.5 Line 16-Col.6 Line 42) for a custom 3D view.

Regarding Claim 14

Kozah teaches comprising the step of adding or editing at least one object in said at

least one editable layer or in said at least one formatted drawing or in at least one

set of formatted data (Kozah: Col.11 Lines 16-22; Awe: Col.5 Lines 54-63).

Regarding Claim 15

Awe with Kozah teaches the step of moving at least one object in said at least one

editable layer or in said at least one formatted drawing or in at least one set of

formatted data (Awe: Col.4 Line 64-Col.5 Line 15 – changing the display

representation – Col. Col.4 Lines 34-37 - eg. door swing/movement; Kozah: Col.8

Lines 16-19).

Regarding Claim 16

Awe teaches the step of modifying at least one object in said at least one editable

layer or in said at least one formatted drawing or in at least one set of formatted data

(Awe: Col.5 Lines 54-63).

Regarding Claim 18

Kozah teaches that step a) includes the step of tracing and adding a traced object to

said one or more objects or one set of formatted data (Kozah: Col.2 Lines 37-50).

Regarding Claim 19

Kozah teaches step a) includes the step of modifying one or more objects or one of

electrical properties, physical properties, aesthetic properties, or spatial

configurations of one or more objects (Kozah: Col.1 Lines 50-52, Col.2 Lines 43-48,

Col.3 Lines 15-18).

Regarding Claim 21

Kozah teaches notifying performed in said verifying and notifying step is performed

by prompting the user (Kozah: Col.7 Lines 61-65) and, when required to provide said

useful definition (Kozah: Col.8 Lines 20-23), requires the user to correct any

insufficiencies in response to an insufficiency notification (Kozah: Col.8 Lines 45-55;

Fig.9).

Regarding Claim 22

Kozah teaches said communications engineering or network management

application is selected from the group consisting of wireless propagation models,

measurement tools, component placement or layout visualization tools, optimization

tools, bill of materials generating tools, asset management tools, and network

performance management or prediction tools (Kozah: Col.10 Lines 26-40).

Regarding Claim 23

Kozah teaches scaling at least part of said at least one formatted drawing or said at

least one set of formatted data or at least one object of said one or more objects as

sizing the drawing (Kozah: Abstract).

Regarding Claim 24

Kozah teaches step of adding measurement data to said at least one of said one or

more objects or said at least one formatted drawing or said at least one set of

formatted data (Kozah: Fig.7 steps 7.06-7.12).

Regarding Claim 25

Awe teaches the step of specifying or invoking a propagation model for performing predictions of performance (Awe: Fig.1-2, Col.5 Lines 19-25).

Regarding Claim 26

Awe teaches the step of specifying or invoking a listing of communications equipment (Awe: Col.3 Lines 41-50).

Regarding Claims 27-30

Apparatus claims 27-30 respectively disclose similar limitations as claims 13-16 and are rejected for the same reasons as claim 13-16 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

Regarding Claim 32-33

Apparatus claims 32-33 respectively disclose similar limitations as claims 18-19 and are rejected for the same reasons as claim 18-19 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

Regarding Claim 35-40

Apparatus claims 35-40 respectively disclose similar limitations as claims 21-26 and are rejected for the same reasons as claim 21-26 respectively. Kozah & Awe both disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1).

8. **Claims 17, 20, 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,337,149 issued to Kozah et al (Kozah hereafter), in view of U.S. Patent No. 6,509,906 issued to Awe et al (Awe hereafter), further in view of U.S. Patent No. 5091869 issued to Ingram et al (Ingram hereafter).**

<u>Regarding Claim 17</u>

Teachings of Awe with Kozah are shown in claim 13 rejection above.

Awe with Kozah do not teach explicitly step of removing extraneous objects from said one or more objects or from said at least one formatted drawing or in from at least one set of formatted data.

Ingram not teach explicitly step of removing extraneous objects from said one or more objects or from said at least one formatted drawing or in from at least one set of formatted data (Ingram: Col.12 Lines 21-23).

It would have been obvious to one (e.g. a designer) of ordinary skill in the art at the time the invention was made to apply the teachings of Ingram to Kozah & Awe to electronically collect floor plan based information. The motivation to combine would have been that <u>one skilled in the art and Kozah</u> are aware of Ingram's teachings (Kozah: Background) and would use Ingram to increase the accuracy of measurements taken to eliminate deficiencies.

Regarding Claim 20

Ingram teaches notifying performed in said verifying and notifying step is performed in an automatic fashion without feedback being provided to the user (Ingram: Col.5 Lines 44-48).

Regarding Claim 31 and 34

Apparatus claims 31 and 34 respectively disclose similar limitations as claims 17 and 20 and are rejected for the same reasons as claim 17 and 20 respectively.

Kozah, Awe and Ingram, all disclose apparatus implementations (Kozah: Fig1, Awe: Fig.1, Ingram: Fig.4).

Conclusion

9. All claims are rejected.

10. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

11. **Examiner's Note:** Examiner has cited particular columns and line numbers in the

references applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings of the art and are

applied to specific limitations within the individual claim, other passages and figures

may apply as well. It is respectfully requested from the applicant in preparing

responses, to fully consider the references in their entirety as potentially teaching all

or part of the claimed invention, as well as the context of the passage as taught by

the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to

indicate the portion(s) of the specification which dictate(s) the structure relied on for

proper interpretation and also to verify and ascertain the metes and bounds of the

claimed invention.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akash Saxena whose telephone number is (571) 272-8351. The examiner can normally be reached on 9:30 - 6:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini S. Shah can be reached on (571)272-2279. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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